REMARKS

Claims 1 – 35 are pending in the application. Claim 27 has now been amended.

Favorable reconsideration of this rejection in view of the above amendments and the following explanations is respectfully requested.

Request for Withdrawal of Finality

The present Office Action has been made final. The reason it was made final is given as being that Applicant's amendments necessitated the new grounds of rejection.

Applicant respectfully traverses this finding. The new rejection under 35 USC 102 is substantially *the same rejection* as the previous rejection to Fisher.

Regarding the rejection to Fisher, agreement was reached at the interview on January 9, 2008 between Examiner Hoang and Examiner Chrales and applicants' representative Dr. Paul Fenster and inventor Rymon on January 9, 2008.

At that interview, applicants' representative explained the difference between the claimed invention and Fisher and the Examiners indicated (on the interview summary) that *the art was overcome by the amendments presented for discussion.* The Examiners pointed out some potential problems with the wording of the amended and new claims, which applicants corrected at that time.

The difference that was agreed at the Interview was that in the case of Fisher the groupings already existed and users were simply assigned to the most appropriate group. By contrast in the present invention the groups do not exist previously. Rather the groupings are based on commonalities found among the resources to which the users have access.

The present invention and the prior art relate to two different aspects of shared systems. Both the Fisher and Anderson references are completely silent as to how groupings are generated and are thus irrelevant to the presently claimed invention.

Why Fisher and Anderson are substantially the same rejection

The above distinction between Fisher and the present invention is also true of Anderson. Anderson like Fisher, has preexisting groupings (referred to as groups), the local areas based on groupings of workstations. Users are added to these preexisting groups based on the location at which they log on, just as with Fisher the groups pre-exist and the user is added to the group based on his attributes.

By contrast in the present invention, the users are analyzed for repeated patterns of resource usage, and groups are defined and populated in accordance with said discovered patterns.

That is to say the distinction over Fisher is the same as that over Anderson.

For these reasons it is believed that the Examiner has not cited any more pertinent art than was cited previously. The rejection to Anderson could have been made with the previous Office Action as it is in substance the same rejection. The rejection to Anderson is not necessitated by applicant's previous amendment.

It is therefore respectfully submitted that the finality of the present Office Action should be withdrawn.

Claim Rejections 35 USC 112

Claim 27 is rejected as lacking antecedent bases for "said node".

Claim 27 has been amended to clarify that the reference is to the user nodes and not to the resource nodes.

Claim Rejections – 35 U.S.C. § 102

Claims 1-7, 10 - 12, 17-19, and 27 - 35 are rejected under 35 U.S.C. 102(b) as being unpatentable over **Anderson, US Patent No. 6,144,959.**

Claims 1 – 7, 10 – 12, 17 – 19 and 27 – 35 are believed to be allowable for all the reasons agreed at the above-mentioned interview, since Anderson is the same rejection as Fisher. These reasons are to be found in the previous response to Office Action filed 11th February 2008.

As with the rejection of the claims based on Fisher, applicant submits that the claims are not *prima facie* anticipated since substantial limitations present in the claims are not present in the prior art references.

In the present rejection, the Examiner begins with claim 27.

The Examiner relates to the pattern recognition unit of claim 27 in col. 3 lines 30 – 42 of Anderson, a passage which teaches that the Novell Directory Services Database Function can be incorporated into the Windows NT Operating system to provide centralized management of the network. Irrespective of what this passage says or means, it is unrelated to the present claims which relate to discovery of patterns of *existing* resources amongst *ungrouped* users and their use to define *new* groupings amongst the users and in particular:

a pattern recognition unit operable with said processor for automatically recognizing pre-existing patterns in said access data, said patterns indicative of a way of grouping said user nodes of said each user so as to discover groups of nodes having common subsets of at least two resources,"

The Examiner further points to claim 4 of Anderson which teaches a system for providing user authentication to a client workstation having a security accessor. Claim 4 teaches providing credentials to the based on login parameters. Whatever this passage teaches it certainly does not teach "automatically recognizing pre-existing patterns in said access data, said patterns indicative of a way of grouping said user nodes of said each user so as to discover groups of nodes having common subsets of at least two resources" as required by claim 27.

The Examiner further points to column 8 lines 22 to column 9 lines 42 of Anderson which refers to a NetLocalGroupAddMembers function. This function accepts a group name which is a name of a local group and then adds a user to the local group if he logs on to a workstation which is in the local domain. The local group of Anderson is a *pre-existing* grouping. The logging on to a new location provides a new parameter, so that Anderson teaches adding users to an *existing* group based on a *new* parameter.

By contrast claim 27 requires:

"automatically recognizing *pre-existing* patterns in said access data, said patterns indicative of a way of grouping said user nodes of said each user so as to *discover groups of nodes having common subsets* of at least two resources".

The claim limitation is to utilizing *pre-existing* information to define *new* groups. The passage in Anderson cited by the Examiner is not related to such limitation. Rather, Anderson adds users to *existing* groups based on a *single new* attribute.

As an additional point, the claim specifically requires two nodes of resources.

Examiner explains away the issue of the two nodes of resources by stating that the user can access many systems, however this explanation is not logical since the feature that Anderson is referring to is the *local group* management feature. Having two such nodes would *imply* that the user is *in two places at once*, which is *physically impossible*.

It is accepted that certain networks do not reinforce the rule that a user may only log on once, so that a single user, in reality two people who know the same password, would appear to be in two places at once.

However, such an unlikely case would be dealt with *differently* by Anderson and by a case according to the present invention. In the case of Anderson the user would be added separately to two separate pre-exising local groups based on the *new* parameters of location. In the case of the present invention by contrast a new group that has never existed before would be set up indicating the *unique combination* of these two resources, however the group could not be set up until *two separate users* log on at the same location *pairs* (the relevant wording of claim 27 is "said patterns indicative of a way of grouping said nodes so as to discover groups of nodes having common subsets of at least two resources that are assigned in common"). Even agreeing *arguendo* to the Examiner's supposition two users logging on to two separate systems would not be used to form a *new* group in Anderson, any more than one user would.

It is submitted that Anderson's NetLocalGroupAddMembers feature therefore does not discover new groups based on pre-existing parameters or nodes or indeed preexisting anything.

There is thus no hint or suggestion in Anderson from the NetLocal Group AddMembers feature to do anything remotely like that claimed in claim 27.

Whilst it is true that the users of Anderson may have numerous *other* attributes, these attributes are *not used for grouping*, specifically not used for forming *new* groups, so that grouping in Anderson is based on only a *single* attribute of location and uses *pre-existing* groups.

Even more surprisingly the Examiner purports to have found

"a group definition unit operable with said processor and said pattern recognition unit which can output the groups so discovered as a role".

However all Anderson has ever done is grouped local users who work on the same domain of workstations. The passage bridging columns 8 and 9 of Anderson *never* says that the *group* can be output. All it teaches is that the function can indicate whether the *individual user* has been *successfully added* to the group. Anderson is silent about outputting the *group*. There is certainly no output of *new groups* which did not exist before. None of the cited art teaches this feature.

In conclusion it is submitted that claim 27 is not anticipated in Anderson. Furthermore Anderson does not even hint at the possibility of discovering *new* groups. There is no hint anywhere in Anderson of doing anything other than *adding* users to *existing* groups. In view of this completely different teaching of Anderson it is not surprising that so many limitations in claim 27 are missing from Anderson.

Indeed it is submitted that there is not even a *prima facie* case of anticipation of claim 27. As an aside, applicant submits that Anderson is so far removed from the present claim 27 that it could not be the basis for an obviousness rejection.

After claim 27 the Examiner deals with claim 29. The rejections of claim 29 is similar to that of claim 27 and this claim distinguishes over Anderson for the same reasons as given above. In particular, Anderson does not teach:

"a pattern recognition processor associated with said input, for using pattern recognition on said links to find relationship patterns within said links, and from said patterns to form at least one group from nodes of said first set, wherein said nodes being formed into said group share relationships with at least two nodes in said second set."

Rather Anderson teaches adding individual users to pre-existing groups based on logging on to a given location.

Regarding claim 30, the rejections are believed to have been answered above since Anderson does not teach:

"grouping nodes in said first set according to respective links such that all nodes in said first set having links to at least two commonly held nodes in said second set are assigned to a same group, thereby discovering groups in said data according to said initially unknown structure."

The Examiner cites Anderson col. 3 lines 1 – 55, col. 8 line 62 – col. 9 line 10 against this passage but as discussed above in respect of claim 27, these passages in Anderson merely teach that a user logs on at a certain location and is added to an existing group at that location.

Furthermore, it is pointed out that the user of Anderson cannot logically be in two places at once and therefore there is no sense in providing a group for users sharing two links or attributes. The groups are provided based on a single attribute of location only. Whilst it is true that the users of Anderson may have numerous other attributes, these other attributes are *not used for grouping,* certainly not for forming *new* groups based on *pre-existing* attributes. Rather Anderson teaches adding users to existing groups based on new attributes.

Claim 31 is rejected on the basis of column 8 line 22 – column 9 line 42 of Anderson and column 3 lines 1 – 55 and column 8 line 62 – column 9 line 10. But all these passages teach is the addition of a user to a group on the basis of the location of a workstation to which he logs on. These passages fail to teach "

"providing a group for users sharing all of a subset of at least two of said links or attributes, and

outputting said provided groups."

The reason that these passages fail to teach this feature is that no group is provided in Anderson for users sharing two links or attributes. The groups pre-exist and are for location only. In any event, no such group is *output* since all Anderson teaches is that the successful *addition* of the individual *user* to the group can be queried. There is no mention of a query to obtain all the members of the group.

Claims 34, 35, 1, 25 and 26 are rejected as corresponding to earlier claims already rejected. In particular claims 34, 35 and 1 are rejected for the same reasons as claim 30.

Claims 25 and 26 are rejected for the same reason as claim 1, which in turn was rejected for the same reason as claim 30. Claims 34, 35, 1, 25 and 26 are believed to be allowable in accordance with the corresponding claims, in particular claim 30 already discussed above.

In particular claim 34 defines:

"grouping nodes in said first set according to respective links such that all nodes in said first set having links to at least two commonly held nodes in said second set are assigned to a same group, thereby discovering groups in said data according to said initially unknown structure."

Claim 35 defines:

"a structuring unit, associated with said search unit, configured for grouping nodes in said first set according to respective links such that all nodes in said first set having links to at least two commonly held nodes in said second set are assigned to a same group, thereby discovering groups in said data according to said initially unknown structure."

Claim 1 defines:

"a grouping unit, associated with said discovery unit, configured to use said discovered patterns to form at least one group from said user nodes or said resource nodes using said automatically discovered patterns, such that users or resources having all of a subset of at least two links to common resources or users are placed into a same group."

Claim 25 defines:

"automatically discovering existing relationship patterns between said arrangement of nodes and resources across said partitioning,

using said discovered patterns, grouping said arrangement of nodes, wherein said grouped nodes share relationships with at least two common resources, "

Claim 26 defines:

"a discovery unit configured to work with said processor, for automatically discovering relationship patterns within said existing relationships using pattern recognition on said nodes, said resources and said predetermined relationships,

"a node-grouping unit associated with said pattern recognition unit and configured to operate with said processor to use said relationship patterns to form groups from said nodes, such that those nodes that share similar subsets of at least two relationships with said resources are placed in a group together,"

Rather, Anderson teaches adding a user to an *existing* group in accordance with a current location at which he logs on. As a user can only log on from a single location there is no question of a second attribute. As the locations already exist the groups already exist and no relationship patterns are used to form the groups.

Claims 2 – 24 are believed to be allowable *inter alia* as being dependent on an allowable claim 1.

All of the matters raised by the Examiner have been dealt with and are believed to have been overcome.

For the reasons given above it is believed that the present rejection is the same rejection as that provided previously and therefore is believed to be overcome by the previous response. Additional reasons are given in the present response.

In light of the above, at the very least it is submitted that the finality of the Office Action be rescinded, but it is further believed that all the claims now pending in the application are allowable. An early Notice of Allowance is therefore respectfully requested.

Applicant adds that he has done all that seems necessary to the claims based on the art cited and in the absence of such a notice of allowance is contemplating an appeal.

Respectfully submitted,

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